

ABSTRACT

A hierarchical method is provided for fault tolerance in a distributed computer system. A plurality of data centers is provided having a plurality of objects in each of the plurality of data centers. A local sub-protocol is used for dissemination of messages within a data center
 5 in the plurality of data centers and the local sub-protocol is activated from another data center of the plurality of data centers in a single round-trip message in the absence of faults.